Citrus Industry Magazine- UF/IFAS SWFREC Citrus Mechanical Harvesting Program "What's Shakin" column

March 2012

Oleocellosis or oil spotting on the peel of citrus fruit is a common post-harvest injury caused by improper handling. Mechanical injury allows phytotoxic oil to leak out of oil glands and cause injury resulting in oleocellosis. Jim Syvertsen, plant physiologist at CREC and the Tree Health project leader, indicates there has been a concern that mechanical injury from harvesting machines can cause oleocellosis and fruit drop of young, green 'Valencia' sweet orange fruitlets, especially late in the harvest season when fruitlets are relatively large. They evaluated effects of winter drought stress and subsequent good irrigation and late-season mechanical harvesting with a canopy shaker on oleocellosis of 'Valencia' sweet orange fruitlets. By April, mature fruit size, juice content, total soluble solids, and acidity were unaffected by previous winter drought stress treatments. Overall, there was some visible oleocellosis on late-season fruitlets but it decreased and healed as fruit expanded even though surface blemishes did not completely disappear. Thus, fruitlet oleocellosis in late-season mechanically harvested trees was cosmetic as it did not increase fruit drop nor alter internal fruit quality. To read more about this and other studies conducted by the team, please visit our website at http://citrusmh.ifas.ufl.edu.